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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,984	09/19/2005	Gerhard Hummel	4874/ PCT	3433
21553 7590 08/22/2007 FASSE PATENT ATTORNEYS, P.A. P.O. BOX 726 HAMPDEN, ME 04444-0726			EXAMINER HOOK, JAMES F	
			ART UNIT 3754	PAPER NUMBER
			MAIL DATE 08/22/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/549,984

Applicant(s)

HUMMEL ET AL.

Examiner

James F. Hook

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 11-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,2,11-16 and 19-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

The amendment filed June 22, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: claims 20 and 21 introduce subject matter with regards to a "circular ring disk shape", "a limited longitudinal extent", a "cylindrical outer web", and "disk shaped middle web", where the subject matter does not appear in the specification in the manner it is now claimed, and it is not clear from the drawings whether such can be clearly ascertained as being descriptive of what is seen in the drawings when the drawings do not show the specific language now being added to the claims and disclosure. If applicant feels this is in error than the specification will be objected to in the future as not supporting the claim language, however, at this time the examiner feels the subject matter above is in fact new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 20-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As per the paragraph above, claims 20 and 21 contain new language which is not supported by the specification or the figures per se and therefore constitutes new matter. Claims 22-26 are rejected due to their dependence upon claims 20 and 21.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 11-15, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Cohen and Lestak. The patent to Kikuchi discloses the recited insulation arrangement for pipes comprising at least one insulation layer 2, an outer sheath 4 which can be made of a thin metal layer which is a metal foil layer, the ends of the insulation layers are seen to have a Z shaped termination profile as seen in figures 3 and 4, thereby forming a shell with at least one longitudinal seam in which the insulation is inserted, where the Z shaped profile extends from a web adjacent the metal layer through a middle web, and to a lower web connected to the

insulation, the shell is a full shell that is slipped over the pipe by means of the longitudinal seam, adhesive can be used along with a flap 4a to close the shell at the seam, where the insulation is formed as two half shells which can be adhesively bonded together, in a manner that utilizes a billet type structure such as seen in figures 5-7 as structure 6, and where the metal foil layer is made of aluminum or stainless steel, where the shell is considered to have a shape. The patent to Kikuchi discloses all of the recited structure with the exception of forming the metal foil layer of titanium foil, providing the Z shaped termination profile with a first and second terminations formed as circular disks, welding or adhesively connecting the profiles to the foil layer, and using fiberglass wool. The patent to Cohen discloses that it is old and well known to form an outer metal foil layer of an insulating structure of either aluminum, stainless steel, or titanium type foils. It would have been obvious to one skilled in the art to modify the outer metal foil layer of Kikuchi by substituting a titanium foil for the aluminum or stainless steel foil as suggested by Cohen where such is an equivalent material used for outer foil layers of insulation systems which be obvious to use in place thereof as taught by the reference to Cohen which would also thereby teach that one could expect success when the materials are shown to be known equivalents. The patent to Lestak discloses that it is old and well known in the art to provide a Z shaped first and second termination circular disks 50 which can be made of a metallic screen mesh to hold the insulation in place and create a shell in combination with outer layer 20 to hold insulation 14, where such can be attached to the outer layer and either to the pipe 12 or to a sleeve 64 by welding, where it is considered an obvious choice of

mechanical expedients to use adhesive instead of welding to hold the components together as such is an old and known equivalent manner to connect two components together. It would have been obvious to one skilled in the art to provide the insulation system of Kikuchi with a first and second cylindrical disk Z shaped terminations made of metal to help support the outer foil layer and to create a shell structure to hold the insulation in place on the pipe where such can be welded to the pipe or not welded to the pipe, and can also be welded to the foil sleeve as suggested by Lestak where such would insure the insulation stayed in place on the pipe and would also provide some additional support for the foil layer to prevent damage to the insulation which would require repair and/or replacement thereby saving money, where one skilled in the art would only require common sense to combine the references which teach the same type of insulation systems, and one would expect success from the combination based upon the teachings of the references. The limitation added to claim 1 dealing with when the insulation and how the insulation is provided in an intermediate step is not limiting to the final structure of an article claim, therefore this limitation has not been dealt with, however, the prior art appears to teach the same assembly method and is therefore also covered by the prior art references, for instance Lestak and Kikuchi.

Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Cohen and Lestak as applied to claims 1, 2, 11-15, and 20-27 above, and further in view of Oser. The patent to Kikuchi as modified discloses all of the recited structure with the exception of forming the metal foil layer with stiffening elements such as a profiled structure, and providing such with stiffening elements. The

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patent to Oser discloses that it is old and well known to form an outer metal foil layer of an insulating structure of either aluminum, stainless steel, or titanium type foils, and to provide such with ribs 24 which would act as stiffening elements formed adjacent to the foil outer layer and thereby give the foil layer a pattern. It would have been obvious to one skilled in the art to modify the outer metal foil layer of Kikuchi as modified by providing such with ribs to strengthen the foil layer which would give the layer a pattern as suggested by Oser where providing ribs would help strengthen the thin metal layer to prevent premature failure thereby saving money in replacement costs, where one skilled in the art would only require common sense to combine the teachings of Kikuchi and Oser where both are dealing with insulating structures where one would expect success.

***Allowable Subject Matter***

Claims 17 and 18 are allowed.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 11-16, and 19-27 have been considered but are moot in view of the new ground(s) of rejection.

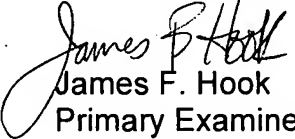
***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Russum disclosing a state of the art metal shell provided with insulation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James F. Hook  
Primary Examiner  
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JFH